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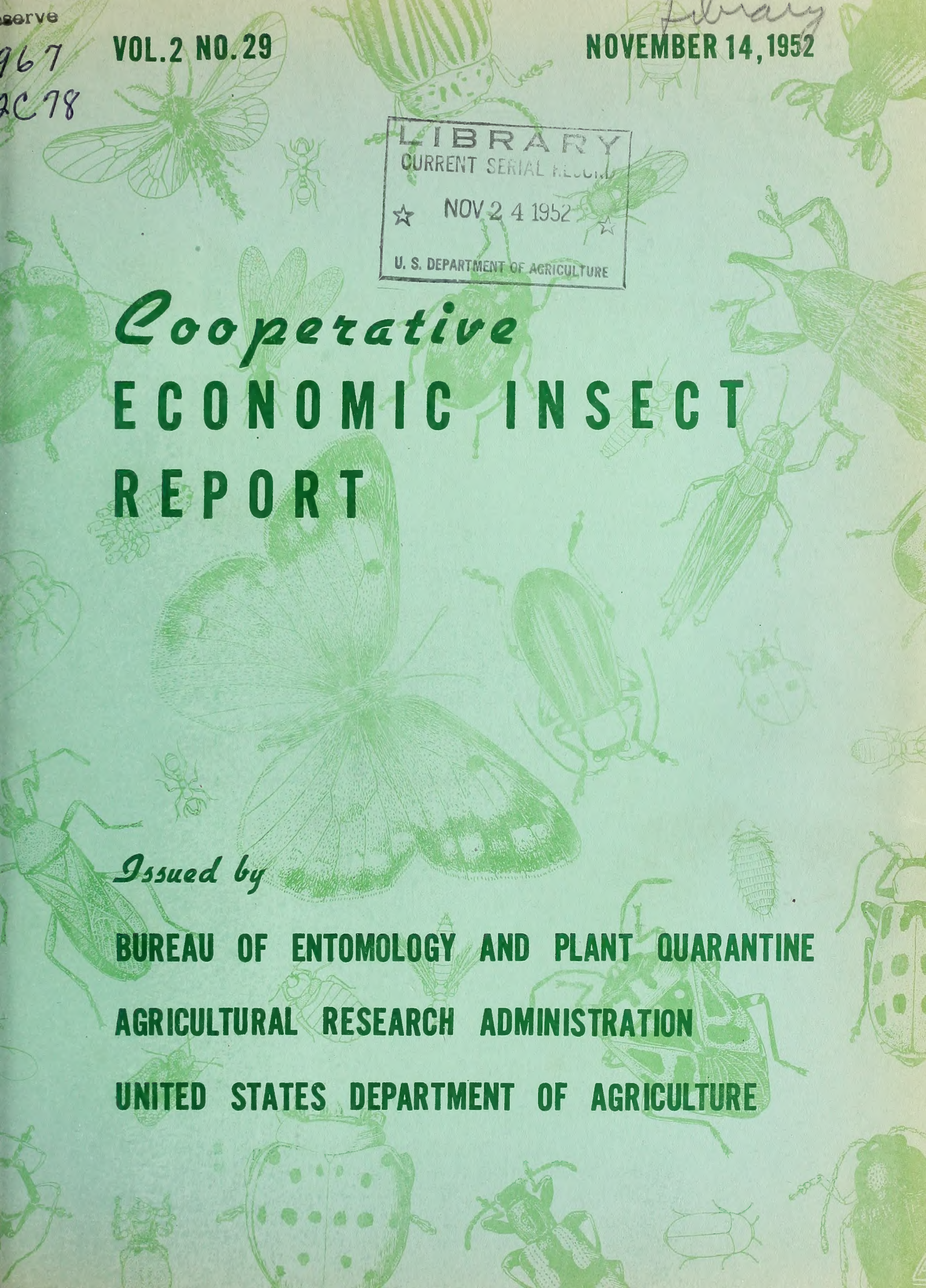

Cooperative ECONOMIC INSECT REPORT

Issued by

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
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BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

DIVISION OF INSECT DETECTION AND IDENTIFICATION

SECTION OF ECONOMIC INSECT DETECTION AND REPORTING

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Bureau serves as a clearing house and does not assume responsibility for accuracy of the material.

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Section of Economic Insect Detection and Reporting
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Volume 2 November 14, 1952 No. 29

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

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MEXICAN BEAN BEETLE eradication program in Ventura County, California. (page 378)

PINK BOLLWORM survey progress. (page 380)

SCALE INSECT, believed to be new to the United States, reported on pine in Baltimore, Maryland. (page 382)

WEATHER FOR THE WEEK ENDING NOVEMBER 11, 1952

General precipitation in the South Central and Eastern sections of the country during the last few days of the week reduced the fire hazard and broke the drought in the lower Mississippi Valley. Rainfall totals ranged from 1 to over 3 inches in Louisiana, Mississippi, Arkansas, Tennessee, and some adjacent areas. In the Far West, the North Central Interior, and the Western portions of the Great Plains precipitation was much below normal, with weekly totals generally ranging from a few hundredths up to a quarter of an inch. Precipitation amounts were too small to measure in a large area including central California, Nevada, Utah, southern Idaho, southern Montana and north and western Wyoming.

Snowfall was reported on the 8th and 9th with amounts ranging up to 4 inches in the eastern mountains of Arizona and the Oklahoma Panhandle. Snow also fell in much of the North East on the 6th and 7th with depths ranging from 2 inches in western Maryland up to 8 inches in southwestern New York. There was a light snow cover throughout the week in scattered mountain areas of the North East.

The week was warmer than normal; generally by 1 to 3 degrees in the Southwest,along the West Coast and in the North Central Interior. Elsewhere temperatures averaged normal or below. East of the Rocky Mountains the precipitation near the end of the period was followed by much colder weather and many stations in the lower Great Plains recorded their lowest readings so far this fall. Temperatures fell below freezing in all sections except the Southeast, the extreme South and in the Western portions of the Pacific States. (Summary Supplied by U. S. Weather Bureau).

* *

Reports in this issue are for the week ending November 8 unless otherwise designated.

CEREAL AND FORAGE INSECTS

LUPINE MAGGOT (Hylemya lupini) -- FLORIDA - Seventeen percent of lupine plants observed infested, 53 percent infested with eggs only, 30 percent uninfested. Egg laying still much in evidence; pupation not yet started. (F. E. Guthrie, Gadsden County).

FULLER ROSE BEETLE (Pantomorus godmani) -- VIRGINIA - Adults damaging planting of alfalfa on Eastern Shore. (Brubaker, Greenwood, Hofmaster).

FRUIT INSECTS

PEACH TREE BORER (Sanninoidea exitiosa) -- UTAH - Infestations in some peach and apricot orchards more severe than normal this fall. (G. F. Knowlton, October 30).

CITRUS INSECT CONDITIONS -- FLORIDA

Activity for fourth week of October: Purple scale (Lepidosaphes beckii) infesting 89 percent of groves checked. Slight reduction in activity but high in West Coast and Indian River Districts. Florida red scale (Chrysomphalus aonidum) activity declined sharply as peak of current hatch passed. Fifty-one percent of groves infested. Citrus red mite (purple mite) Paratetranychus citri activity reducing but increasing trend expected during November. Forty-four percent of groves infested. Citrus rust mite (Phyllocoptruta oleivora) declined on both leaves and fruit, some further reduction expected. Seventy-one percent of groves infested. Highest activity in West Coast, Upper East Coast and Bartow Districts. (Pratt and Thompson).

HICKORY SHUCKWORM (Laspeyresia caryana) -- GEORGIA - Heavy infestation in pecan shucks at harvest in Albany area. Particularly heavy on Stuart variety. (M. R. Osburn, November 4).

CITRUS BLACKFLY INFESTATIONS IN MEXICO -- Light infestation of citrus blackfly (Aleurocanthus woglumi) discovered in Matamoros, Tamaulipas October 30 through cooperative survey efforts of USDA, Mexican Department of Agriculture and Mexican National Blackfly Committee. Infestation consisted of immature stages of the insect on several leaves on two trees. Another infestation found on one orange tree in same area November 3. Cooperative eradication measures were initiated immediately. Infested blocks and all adjacent blocks will be sprayed at weekly intervals with one application per week for at least four weeks. Additional inspectors have been moved to Matamoros to complete inspection of the city as soon as possible. One other infestation was found in Matamoros in January 1950. This infestation was eradicated through prompt application of oil sprays. Subsequent inspections failed to disclose other infestations until October 30, 1952. Citrus blackfly has been found in almost all citrus producing areas in Mexico and has caused great economic loss whereever it has become established. Matamoros is located across the Rio Grande River from Brownsville, Texas. (N. O. Berry).

TRUCK CROP INSECTS

MEXICAN BEAN BEETLE (Epilachna varivestis) -- CALIFORNIA - The third consecutive year of treatment of all bean plantings within a one-mile radius of last known infestation (found near Oxnard in mid-summer 1950) has been completed. Treatments included keeping all growing vines within the one-mile radius covered with one percent rotenone throughout the growing season. Intensive survey conducted concurrently with the treatments has failed to show further infestation. Comparable inspection will be continued for another 3 years which, if completed without finding infestation, will be considered as evidence that eradication has been accomplished. The effort to date has covered six years and involved an expenditure of very close to a million dollars. If eradication is accomplished, this expenditure is believed to be justified as these are the only known infestations in the Pacific Coast states, while acceptance of the insect as an established pest would have placed 350,000 acres of contiguous plantings open to infestation with heavy treatment costs needed for future control. (H. M. Armitage).

BEAN LEAF ROLLER (Urbanus proteus) -- FLORIDA - Abundant enough in many bean fields to require control measures in Sanford area. (J. W. Wilson).

SPIDER MITES -- FLORIDA - Septanychus tumidus building up in celery fields in Sanford area, but have not yet reached serious proportions. (J. W. Wilson).

APHIDS (Aphidae) -- VIRGINIA - Cabbage aphids (*Brevicoryne brassicae*) increasing on collards, cabbage and savoy cabbage in Norfolk area. Turnip aphid (*Rhopalosiphum pseudobrassicae*) causing minor damage to few plantings of turnip greens. Green peach aphid (*Myzus persicae*) on most plantings of spinach. (Brubaker, Greenwood, Hofmaster). GEORGIA - Turnip aphid populations beginning to build up on young turnips throughout much of southern area, October 31. (F. S. Chamberlin). FLORIDA - Spotted infestations of turnip aphid on turnips in Gadsden County area. (L. M. May). Aphids beginning to build up in celery fields but have not reached serious proportion in Sanford area. (J. W. Wilson). UTAH - Cabbage aphid damaging in some fields in American Fork vicinity. Much control needed since late August in several counties. (G. F. Knowlton, October 31). WASHINGTON - Moderate colonies of cabbage aphid on seed stalks of radish plants and brussel sprouts in Sumner gardens. Moderate numbers of potato aphid (*Macrosiphum solanifolii*) on underside of leaves and on seed pods of garden lilies at Sumner. Adult rose leafhopper (*Typhlocyba rosae*) still abundant on rose foliage; some on raspberries and blackberries. (C. F. Doucette).

CABBAGE CATERPILLARS -- VIRGINIA - Causing damage in untreated or improperly treated crucifer plantings in Norfolk area. (Brubaker, Hofmaster, Greenwood). FLORIDA - Cabbage looper (*Trichoplusia ni*) abundant enough in older cabbage fields to require control measures. (J. W. Wilson).

YELLOW-STRIPED ARMYWORM (*Prodenia ornithogalli*) -- MISSISSIPPI - Large larvae observed feeding on sweetpotatoes, dug and left in field over weekend, in ten acre field in Covington County. (J. P. Kislanko).

BEET LEAFHOPPER (*Circulifer tenellus*) -- UTAH - Unusually numerous on celery in experimental planting at North Farmington. Such abundance is uncommon on this host in this area. (G. F. Knowlton, October 31).

SLUGS -- WASHINGTON - Extremely dry weather during September and October has already reduced slug activity to very low level in Puget Sound area. (C. F. Doucette).

PINK BOLLWORM SURVEY PROGRESS -- This season's inspection for pink bollworm (Pectinophora gossypiella) has been completed in Florida, Georgia and Alabama. No pink bollworm was found in these states. Inspection in Mississippi and Arkansas is being completed and no pink bollworm had been found as of November 3. Some inspection to be completed in Louisiana where one new parish (Desoto) has been found infested this season. Inspection incomplete in Texas, Oklahoma, New Mexico, Arizona, California and the West Coast of Mexico. All except 9 counties in Texas east of the old regulated area have been found infested this season. In addition, there have been 3 newly infested counties in The Texas Panhandle, north of the old regulated area. In Oklahoma, one new county (Hughes), has been found infested. No infestations have been reported at this date in Arizona, California or the West Coast of Mexico. (R. W. White, November 3).

Additional newly infested counties in Texas and Oklahoma not previously listed in the Report: Texas - Briscoe County in the Panhandle, Ellis County in East Texas; Oklahoma - Cleveland and Love Counties. The Oklahoma counties are east of and adjoining the old regulated area, and have been reported as infested since R. W. White's report was received.

LEPIDOPTEROUS LARVAE DETERMINATIONS -- Five hundred twenty-three larvae, collected from cotton during July and August in MISSISSIPPI and LOUISIANA, were submitted by E. W. Dunnam September 10. These were determined as : Tobacco budworm, Heliothis virescens (F.), 326; bollworm, H. armigera (Hbn.), 186; loopers of the Autographa group, 7; cotton leafworm, Alabama argillacea (Hbn.), 2; yellow-striped armyworm, Prodenia ornithogalli Gn., 1; and fall armyworm, Laphygma frugiperda (A & S), 1. Of these 79 tobacco budworms, 32 bollworms, and 1 yellow-striped armyworm were collected by S. L. Calhoun between July 10 and 31 in 3 Mississippi counties and 2 Louisiana parishes; 243 tobacco budworms, 141 bollworms, 7 loopers, 2 cotton leafworms, and 1 fall armyworm by R. Furr at Stoneville, Washington County, Mississippi; and 13 bollworms and 7 tobacco budworms, taken by M. V. Courtney on August 14 from near Greenwood, Leflore County, Mississippi. This last was the only collection containing more bollworms than tobacco budworms. At times it has appeared that bollworm becomes more numerous in cotton fields than tobacco budworms late in the season; however, between August 19 and 21 R. Furr collected 215 tobacco budworms and only 130 bollworms in the same fields. More reliable information is needed in regard to the relative abundance of "bollworms" in cotton fields in all localities throughout the season and from year to year. (R. W. Harned).

CORRECTION: Vol. 2, No. 28, p. 371 under "Lepidopterous larvae determinations." Statement "specimens taken from cotton between July 7 and 11" should read "between June 11 and July 7."

SPIDER MITES DETERMINATIONS -- MISSISSIPPI - Spider mites taken on cotton July 3 and 28 at Stoneville were determined as Septanychus texazona McG. (3 collections), Tetranychus bimaculatus Harvey (1 collection), and both species (1 collection). Spider mites collected from cotton at Scott, Bolivar County, September 8 determined at T. bimaculatus. Collection made in late August on cotton in Stoneville area shows both T. bimaculatus and S. texazona. Collections from cotton and other plants during same period in this area show T. bimaculatus and T. schoenei McG. from morning glory; T. bimaculatus from cotton, peach, morning glory, soybean and tomato; S. texazona from cotton and pigweed. E. W. Dunnam submitted the collections. Mixed populations of different species of mites occur frequently and may account for some of the unsatisfactory results reported from the use of miticides. (R. W. Harned).

OTHER FIBER PLANT INSECTS

MEXICO -- Larvae and adults of a weevil attacking buds of henequen were collected at Ciudad Victoria, Tamaulipas by J. H. Baldas, August 20 and submitted by W. K. Clore. The adults have been identified as Scyphophorus acupunctatus (Gyll.), family Curculionidae. This insect is known locally as "max" or "cogollero". At times it may destroy as many as 10 percent of the plants in a henequen planting. Ten to 15 larvae and adults may be taken from an infested plant. No effective control measures have been devised.

Another beetle submitted by Clore was determined as Phileurus sp. near valgus (L.), family Scarabaeidae. This insect was found feeding in the stem of the henequen plant. Economic importance of this species on henequen has not been determined as specimens were collected from decayed material; however, farmers report it as destructive. (R. W. Harned).

FOREST INSECTS

APHIDS (Aphidae) -- UTAH - Cinara saligna extremely numerous on twigs of golden willow growing in lower areas of Utah County in American Fork and Lehi vicinities, Clavigerus smithiae also very abundant on several golden willows in Lehi vicinity and in Tooele in Tooele County. (G. F. Knowlton). WASHINGTON - Cinara tujafilinus very common on cultivated arborvitae in Yakima Valley. (E. J. Newcomer).

NEW SCALE INSECT IN MARYLAND -- Samples of pine infested with a scale insect were collected in Baltimore and submitted by W. W. Cantelo October 10. Determination shows that the specimens are Poliaspis pini Mask. According to available records this is the first evidence of this insect in the United States. From reports in literature the species appears to be common, if not abundant, in Japan and has also been reported from China. It has been recorded on other conifer species as well as Pinus in these countries. (E. N. Cory).

INSECTS AFFECTING MAN AND ANIMALS

SCREW-WORM (Callitroga americana) -- GEORGIA - Severe infestation on calf in Spalding County October 27. (M. DuPree).

SURVEY METHODS

CHERRY FRUIT FLY (Rhagoletis cingulata)

Three methods of detecting cherry fruit fly infestations are currently being used in Siskiyou County, California.

Detection of Adults: This phase is accomplished by trapping, using a sticky-sided carton baited with ammonium carbonate. Quart-size Sealright Thermorex paper containers are used with the inner surfaces coated with Mapco Stickem Special. The trap is attached to a tree with a wire that extends through the bottom and has a small hook on the inside on which the bait packet is hung. Approximately two ounces of powdered ammonium carbonate is sealed into two inch square plastic packets. The packets remain sealed until time of use (when 10-12 perforations are made in them) and are replaced in the traps at weekly intervals. Traps are placed, when convenient, at a height of about eight feet above the ground on southeast side of the tree. Traps are generally replaced once or twice during the three months' trapping season.

Detection of Larvae: Accomplished by processing fruit samples. One pound samples of cherries are crushed by running them through an old-fashioned hand-operated clothes wringer with rollers grooved and set apart so as not to crush pits. The crushed fruit is placed over 1/4 inch mesh screen in hot water, pre-heated to 140° - 160° F., for at least one minute, the fruit is then discarded. The pulpy water remaining, containing the larvae if any, is placed in a pan in a swirling device propelled by a small electric motor. Rotation speed is controlled by a rheostat. In the swirling water larvae and other heavier particles gravitate to the center of the pan where the greatly reduced level of water permits easy detection.

Detection of Pupae: This is accomplished through soil sifting. Soil within the drip line of the tree is sifted through mesh screen (6 wires per inch) to eliminate large particles then resifted through a smaller screen (14 wires per inch) to eliminate fine soil. The remainder is inspected visually for puparia. This method of detection has been used primarilly to confirm infestation on properties where adults were taken in traps but no larvae found in fruit samples processed. (D. W. Robinson).

SURVEY METHODS

CODLING MOTH [illegible]

These methods of [illegible] are currently being used at [illegible], California.

[illegible]

[illegible]

[illegible]

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